<div align="center">__Claims__</div>

1. – 66. (canceled)

67. (currently amended) A computer-implemented method comprising:

receiving multiple sets of reference decoder parameters signaled for a given bit stream of encoded data for a given video clip, wherein each of the multiple sets comprises a rate parameter and a decoder buffer size parameter for a reference decoder model that specifies constraints on fluctuations of [[a]] the given bit stream of encoded data for the given video clip, and wherein each of the multiple sets indicates a different and alternative combination of rate parameter and decoder buffer size parameter for the same video images in the given bit stream of encoded data for the given video clip;

determining an operating condition using any of the multiple sets, wherein the operating condition indicates peak rate or decoder buffer size for decoding the encoded data for the given video clip, and wherein the multiple sets are concurrently available for use in the determining the operating condition; and

at a decoder, receiving and decoding the encoded data for the given video clip in accordance with the operating condition.

68. (previously presented) The method of claim 67 wherein the decoder buffer size parameter for each of the multiple sets is different.

69. (previously presented) The method of claim 67 wherein the rate parameter for each of the multiple sets is different.

70. (previously presented) The method of claim 67 wherein the decoder performs the determining.

71. (previously presented) The method of claim 67 further comprising:

receiving multiple additional sets of reference decoder parameters;

re-determining the operating condition using any of the multiple additional sets; and

at the decoder, receiving and decoding the encoded data for the given video clip in accordance with the re-determined operating condition.

72. (currently amended) The method of claim 67 further comprising receiving a number parameter that indicates how many sets of reference decoder parameters are signaled for the given bit stream of encoded data for the given video clip.

73. (currently amended) The method of claim 67 wherein the determining comprises selecting a parameter of one of the multiple received sets.

74. (previously presented) The method of claim 67 wherein the determining comprises interpolating between parameters of two of the multiple sets.

75. (previously presented) The method of claim 67 wherein the determining comprises extrapolating from a parameter of one of the multiple sets.

76. (previously presented) The method of claim 67 wherein the peak rate is minimum peak rate, and wherein the determining comprises setting the minimum peak rate based upon one or more of the decoder buffer size parameters of the multiple sets.

77. (previously presented) The method of claim 67 wherein the determining comprises setting the decoder buffer size based upon one or more of the rate parameters of the multiple sets.

78. (currently amended) The method of claim 67 wherein the multiple sets are signaled in a stream header for the given bit stream of encoded data for the given video clip.

79. (previously presented) The method of claim 67 wherein the multiple sets are signaled out-of-band for the given video clip.

80. (previously presented) The method of claim 67 wherein each of the multiple sets further comprises an initial buffer fullness parameter.

81. (currently amended) The method of claim 67 wherein each of the multiple sets represents a different leaky bucket model for the given bit stream of encoded data for the given video clip.

82. (currently amended) The method of claim 67 wherein each of the multiple sets represents a different point along a rate-decoder buffer size curve for the given bit stream of encoded data for the given video clip.

83. (previously presented) The method of claim 67 wherein the given video clip is an entire video sequence.

84. (previously presented) The method of claim 67 wherein the given video clip is part of a video sequence.

85. (previously presented) The method of claim 67 wherein the decoder is implemented in a handheld computing device.

86. (previously presented) The method of claim 67 wherein the decoder is implemented in a personal computer.

87. (previously presented) The method of claim 67 wherein the decoder is implemented in a disk media player.

88. (previously presented) The method of claim 67 wherein the peak rate corresponds to a drive speed for a disk drive during the decoding the encoded data.

89. (previously presented) The method of claim 67 wherein the peak rate corresponds to a transmission rate for a network connection during the decoding the encoded data.

90. (previously presented) The method of claim 67 wherein the decoding the encoded data occurs during live video transmission for the given video clip.

91. (previously presented) The method of claim 67 wherein the decoding the encoded data occurs during on-demand transmission for the given video clip.

92. (currently amended) A computer-implemented method comprising:
receiving multiple sets of reference decoder parameters signaled for a given bit stream of encoded data for a given video clip, wherein each of the multiple sets comprises a rate parameter and a decoder buffer size parameter for a reference decoder model that specifies constraints on fluctuations of [[a]] the given bit stream of encoded data for the given video clip, and wherein each of the multiple sets indicates a different and alternative combination of rate parameter and decoder buffer size parameter for the same video images in the given bit stream of encoded data for the given video clip; and
processing the multiple sets, wherein the multiple sets are concurrently available for use in determination of an operating condition, and wherein the operating condition indicates peak rate or decoder buffer size for decoding the encoded data for the given video clip.

93. (previously presented) The method of claim 92 wherein the decoder buffer size parameter for each of the multiple sets is different.

94. (previously presented) The method of claim 92 wherein the rate parameter for each of the multiple sets is different.

95. (currently amended) The method of claim 92 further comprising receiving a number parameter that indicates how many sets of reference decoder parameters are signaled for the given bit stream of encoded data for the given video clip.

96. (currently amended) The method of claim 92 further comprising:
receiving multiple additional sets of reference decoder parameters signaled for the given bit stream of encoded data for the given video clip;

processing the multiple additional sets, wherein the multiple additional sets are concurrently available for use in re-determination of the operating condition.

97. (previously presented) The method of claim 92 wherein the multiple sets are signaled out of band.

98. (previously presented) The method of claim 92 wherein the processing comprises reading the multiple sets from a stream header of the bit stream.

99. (previously presented) The method of claim 92 wherein the processing comprises determining the operating condition.

100. (previously presented) The method of claim 92 wherein each of the multiple sets further comprises an initial buffer fullness parameter.

101. (currently amended) The method of claim 92 wherein each of the multiple sets represents a different leaky bucket model for the given bit stream of encoded data for the given video clip.

102. (currently amended) The method of claim 92 wherein each of the multiple sets represents a different point along a rate-decoder buffer size curve for the given bit stream of encoded data for the given video clip.

103. (previously presented) The method of claim 92 wherein the given video clip is part of a video sequence.

104. (previously presented) The method of claim 92 wherein the peak rate corresponds to a drive speed for a disk drive during the decoding the encoded data.

105. (previously presented) The method of claim 92 wherein the peak rate corresponds to a transmission rate for a network connection during the decoding the encoded data.

106. (previously presented) The method of claim 92 wherein the decoding the encoded data occurs during live video transmission for the given video clip.

107. (previously presented) The method of claim 92 wherein the decoding the encoded data occurs during on-demand transmission for the given video clip.

108. (currently amended) A computer-implemented method comprising:

receiving a number parameter that indicates how many sets of reference decoder parameters are signaled for a given bit stream of encoded data for a given video clip;

receiving multiple sets of reference decoder parameters signaled for the given bit stream of encoded data for the given video clip, wherein each of the multiple sets comprises a rate parameter and a decoder buffer size parameter for a reference decoder model that specifies constraints on fluctuations of [[a]] the given bit stream of encoded data for the given video clip, and wherein each of the multiple sets represents a different and alternative point along a rate-decoder buffer size curve for the same video images in the given bit stream of encoded data for the given video clip; and

processing the multiple sets, wherein the multiple sets are concurrently available for use in determination of an operating condition, and wherein the operating condition indicates peak rate or decoder buffer size for decoding the encoded data for the given video clip.

109. (previously presented) The method of claim 108 wherein the decoder buffer size parameter for each of the multiple sets is different, and wherein the rate parameter for each of the multiple sets is different.

110. (previously presented) The method of claim 108 wherein the number parameter and the multiple sets are signaled out of band.

111. (previously presented) The method of claim 108 wherein the processing comprises reading the multiple sets from a stream header of the bit stream.

112. (previously presented) The method of claim 108 wherein the processing comprises determining the operating condition.

113. (previously presented) The method of claim 112 wherein the determining comprises selecting a parameter of one of the multiple received sets, interpolating between parameters of two of the multiple sets, or extrapolating from a parameter of one of the multiple sets.

114. (previously presented) The method of claim 112 wherein the peak rate corresponds to a drive speed for a disk drive during the decoding the encoded data.

115. (previously presented) The method of claim 112 wherein the peak rate corresponds to a transmission rate for a network connection during the decoding the encoded data.

116. (previously presented) The method of claim 112 wherein the decoding the encoded data occurs during on-demand transmission for the given video clip.

117. (currently amended) A computer-implemented method comprising:

receiving multiple sets of reference decoder parameters signaled for a given bit stream of encoded data for a given video clip, wherein each of the multiple sets comprises a rate parameter and a decoder buffer size parameter for a reference decoder model that specifies constraints on fluctuations of [[a]] the given bit stream of encoded data for the given video clip, and wherein each of the multiple sets indicates a different and alternative combination of rate parameter and decoder buffer size parameter for the same video images in the given bit stream of encoded data for the given video clip;

processing the multiple sets, wherein the multiple sets are concurrently available for use in determination of an operating condition, and wherein the operating condition indicates peak rate or decoder buffer size for decoding the encoded data for the given video clip;

receiving multiple additional sets of reference decoder parameters signaled for the given bit stream of encoded data for the given video clip; and

processing the multiple additional sets, wherein the multiple additional sets are concurrently available for use in re-determination of the operating condition, and wherein each of the multiple sets and multiple additional sets represents a different leaky bucket model for the given video clip.

118. (previously presented) The method of claim 117 wherein the decoder buffer size parameter for each of the multiple sets is different, and wherein the rate parameter for each of the multiple sets is different.

119. (previously presented) The method of claim 117 wherein the processing comprises determining the operating condition, and wherein the determining comprises selecting a parameter of one of the multiple received sets, interpolating between parameters of two of the multiple sets, or extrapolating from a parameter of one of the multiple sets.

120. (previously presented) The method of claim 117 wherein the processing comprises determining the operating condition, and wherein the determining comprises setting the peak rate based upon one or more of the decoder buffer size parameters of the multiple sets or setting the decoder buffer size based upon one or more of the rate parameters of the multiple sets.

121. (currently amended) A computer-implemented method comprising:
receiving a number parameter that indicates how many sets of reference decoder parameters are signaled for a given bit stream of encoded data for a given video clip;
receiving multiple sets of reference decoder parameters signaled for the given bit stream of encoded data for the given video clip, wherein each of the multiple sets comprises a rate parameter and a decoder buffer size parameter for a reference decoder model that specifies constraints on fluctuations of [[a]] the given bit stream of encoded data for the given video clip;
determining an operating condition using any of the multiple sets, wherein the operating condition indicates peak rate or decoder buffer size for decoding the encoded data for the given video clip, wherein the multiple sets are concurrently available for use in the determining the operating condition, and wherein each of the multiple sets represents a different and alternative

point along a rate-decoder buffer size curve for <u>the same video images in the given bit stream of encoded data for</u> the given video clip; and

at a decoder, receiving and decoding the encoded data for the given video clip in accordance with the operating condition.

122. (previously presented) The method of claim 121 wherein the decoder buffer size parameter for each of the multiple sets is different, and wherein the rate parameter for each of the multiple sets is different.

123. (currently amended) The method of claim 121 wherein the number parameter and the multiple sets are signaled in a stream header for <u>the given bit stream of encoded data for</u> the given video clip.

124. (previously presented) The method of claim 121 wherein the number parameter and the multiple sets are signaled out-of-band for the given video clip.

125. (previously presented) The method of claim 121 wherein the determining comprises selecting a parameter of one of the multiple received sets, interpolating between parameters of two of the multiple sets, or extrapolating from a parameter of one of the multiple sets.

126. (previously presented) The method of claim 121 wherein the decoder is implemented in a handheld computing device, in a personal computer, or in a disk media player.

127. (previously presented) The method of claim 121 wherein the decoding the encoded data occurs during on-demand transmission for the given video clip.

128. (currently amended) A system comprising:

one or more modules for receiving multiple sets of reference decoder parameters signaled for <u>a given bit stream of encoded data for</u> a given video clip, wherein each of the multiple sets comprises a rate parameter and a decoder buffer size parameter for a reference decoder model

that specifies constraints on fluctuations of [[a]] the given bit stream of encoded data for the given video clip, and wherein each of the multiple sets indicates a different and alternative combination of rate parameter and decoder buffer size parameter for the same video images in the given bit stream of encoded data for the given video clip; and

one or more modules for processing the multiple sets, wherein the multiple sets are concurrently available for use in determination of an operating condition, and wherein the operating condition indicates peak rate or decoder buffer size for decoding the encoded data for the given video clip.

129. (previously presented) The system of claim 128 wherein the decoder buffer size parameter for each of the multiple sets is different, and wherein the rate parameter for each of the multiple sets is different.

130. (previously presented) The system of claim 128 wherein the processing comprises determining the operating condition.

131. (previously presented) The system of claim 130 wherein the determining comprises selecting a parameter of one of the multiple received sets, interpolating between parameters of two of the multiple sets, or extrapolating from a parameter of one of the multiple sets.

132. (currently amended) A computer-readable medium storing computer-executable instructions for causing a computer system programmed thereby to perform a method comprising:

receiving multiple sets of reference decoder parameters signaled for a given bit stream of encoded data for a given video clip, wherein each of the multiple sets comprises a rate parameter and a decoder buffer size parameter for a reference decoder model that specifies constraints on fluctuations of [[a]] the given bit stream of encoded data for the given video clip, and wherein each of the multiple sets indicates a different and alternative combination of rate parameter and decoder buffer size parameter for the same video images in the given bit stream of encoded data for the given video clip; and

Page 11 of 20

processing the multiple sets, wherein the multiple sets are concurrently available for use in determination of an operating condition, and wherein the operating condition indicates peak rate or decoder buffer size for decoding the encoded data for the given video clip.